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February 25, 2005

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS  
ON THE  
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Woodlands at Laurel Hill  
PROJECT MUNICIPALITY : Acton and Westford  
PROJECT WATERSHED : Merrimack and SuAsCo  
EOEA NUMBER : 13414  
PROJECT PROPONENT : The Woodlands at Laurel Hill LLC  
DATE NOTICED IN MONITOR : December 22, 2004

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

The proposed project involves development of 437 residential units on an approximately 74 acre site (in Acton and Westford). The project will result in approximately 40 acres of land alteration including approximately 13 acres of new impervious area and approximately 27 acres of alteration of previously cleared and graded land (previously altered for a planned office park development and now proposed for use as residential yards, leach fields, detention basins and landscaped areas). Traffic impacts are estimated at an average of 2,998 vehicle trips per day and the project includes construction of 622 new parking spaces. Water use is estimated at approximately 93,000 gallons per day (gpd) for potable water and 30,000 gpd for irrigation use. An interbasin transfer of water (approximately 17,200 gpd) is proposed from the Merrimack watershed to the SuAsCo watershed to serve the proposed Westford residential units. The Acton portion of the project will be served by the Acton Water District. Wastewater generation is estimated at approximately 96,000 gpd and an on-site wastewater treatment facility is proposed. The project site includes 3 vernal pools and priority habitat for rare species. A Conservation Restriction (CR) is being proposed for 28 acres of the site.

The project is undergoing MEPA review pursuant to Section 11.03 (1)(a)2. of the MEPA regulations because it involves creation of 10 acres or more of impervious area and Section 11.03 (1)(b)1. because it involves alteration of 25 acres or more of land. The project is also undergoing

MEPA review pursuant to Section 11.03(2)(b) because it will involve a "take" of a species of special concern, Section 11.03(4)(a)2. because it may involve a new interbasin transfer of water determined to be significant by the Water Resources Commission and Section 11.03(6)(a)6. because it may involve generation of 3,000 or more new average daily trips (adt) on roadways providing access to a single location (the ENF estimates 2,998 new trips for a total of 3,038 adt).

The project requires a 401 Water Quality Certification, a Groundwater Discharge permit, and a Distribution System Modification permit from the Department of Environmental Protection (DEP). The project also requires a local Order of Conditions (and on appeal only, a Superseding Order from DEP), a Massachusetts Highway Department (MHD) Access Permit and a Conservation and Management Permit from Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP). The project is also requesting a Determination of Insignificance from the Water Resources Commission (WRC) for an inter-basin transfer. The project may also require a National Pollutant Discharge Elimination System (NPDES) Construction Activities Permit from the US Environmental Protection Agency (EPA).

The project involves financial assistance from the Commonwealth. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project that may cause significant Damage to the Environment as defined in the MEPA regulations.

#### Single EIR Request

In accordance with Section 11.05(7) of the MEPA regulations, the proponent has submitted an Expanded ENF with a request that I allow the proponent to fulfill its EIR obligations under MEPA with a Single EIR, rather than require the usual two-step Draft and Final EIR process. The Expanded ENF received an extended public comment period pursuant to Section 11.06(1) of the MEPA regulations. I have reviewed the proponent's request for a Single EIR in accordance with Section 11.06(8) of the MEPA regulations, and I find that the Expanded ENF did not meet the enhanced standards required in the MEPA Regulations by not describing and analyzing all aspects of the project and all feasible alternatives. Therefore, I must require the usual two-step Draft and Final EIR process. While I am denying the request for a Single EIR, I would like to acknowledge that the ENF contained valuable information that assisted in development of the Scope for the EIR. Should the Draft EIR resolve the substantive issues outlined below, I will consider the procedural options available to me at 301 CMR 11.08(8)(b)(2) as they relate to the Scope for the Final EIR and may allow the Draft EIR to be reviewed as a Final EIR.

#### General

The proponent should prepare a Draft EIR (DEIR) in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations as modified by this Scope. The DEIR should include a copy of this Certificate, a copy of each comment letter received and a response to all comments received. A Project Summary in clear non-technical language should be included in the DEIR. This section of the document should summarize the project, alternatives analyzed, the type and extent of potential impacts, and mitigation measures that the proponent is committed to. It should also include a list of permits required and a

timetable and cost estimate for the project. The DEIR should be updated to reflect any changes since the filing of the ENF.

The DEIR should include a description of all aspects of the project and a schedule for construction and other development activities. The DEIR should also include maps and plans at a reasonable scale that clearly locate and delineate project elements, priority and estimated rare species habitat, areas proposed for conservation restriction, surface water and wetlands resource areas, adjacent land uses, and aquifer protection districts on or adjacent to the project site.

#### Alternatives

The DEIR should include an evaluation of alternatives, including alternative development scenarios and alternative site layouts, to ensure that the proposed project will avoid, minimize and mitigate environmental impacts to the maximum extent feasible. In addition to a reduced build development, the alternatives analysis should include a no-build alternative to establish baseline conditions that can be used to evaluate potential impacts of the proposed project and other alternatives, and to develop appropriate mitigation. The alternative analysis should identify opportunities to minimize impervious area from roadways, parking and other structures and should clearly identify and compare the impacts of alternatives evaluated. The alternative analysis should include a clear comparison of the impacts of each alternative and its project components (including but not limited to acres of land use and alteration, volume of earthwork, impervious area, wetlands, rare species habitat impacts, water use and wastewater generation, traffic and parking).

The DEIR should evaluate alternative sources of water for the Westford portion of the project including obtaining water from Acton or Westford, options that would avoid the need for an inter-basin transfer. The DEIR should discuss the impacts associated with alternative water sources and explain why the proponent has selected the preferred alternative and eliminated other options from further consideration.

The alternatives analysis should consider alternative design elements for stormwater management, such as semi-permeable walkways, vegetated islands in parking areas, and infiltration galleries. The analysis should also consider utilizing stormwater and wastewater for irrigation as alternatives to the installation of wells for groundwater withdrawal.

The DEIR should also evaluate alternative locations for the wastewater treatment facility and discharge area, discuss the potential environmental impacts of each alternative, and explain why the preferred location is being selected and others eliminated from further consideration.

#### Land Use and Alteration

The DEIR should provide a summary of overall land alteration with a breakdown indicating the area of land being altered for various project elements including buildings and roadways and parking, lawns, water and wastewater infrastructure including leach fields, stormwater system components. Land alteration information should include acreage of previously disturbed areas and clarify development activities proposed in these areas. The

DEIR should also clarify the areas of land proposed to be left undisturbed and differentiate between areas proposed for conservation restriction and other undisturbed areas.

### Wetlands

All wetlands resource areas on and adjacent to the project site should be clearly identified and delineated on site plans. The DEIR should discuss potential impacts of the project to wetland resources (including on-site vernal pools, and Nashoba Brook and its riverfront area) and describe measures that will be implemented to avoid and minimize adverse impacts.

The DEIR should include an assessment of wetlands on the project site including their function and values, and demonstrate how the project will meet relevant performance standards for work in and adjacent to wetland areas. The Acton Conservation Commission has noted in their comment letter that some well-developed wetlands have formed as a result of land alteration conducted for a previously proposed (but undeveloped) office park and that the proponent has agreed to complete these detention basins as "constructed wetlands" in accordance with DEP Stormwater Management Policy, and implement additional measures to preserve and protect site wetlands. The DEIR should provide an update on wetlands construction and mitigation plans, including any planned extension of the proposed 28-acre conservation restriction area to include additional wetlands. The DEIR should also discuss any proposed changes to site layout since the ENF filing to accommodate wetland setback areas as further detailed in the Conservation Commission comments.

The DEIR should evaluate the feasibility of locating the wastewater treatment plant access road, water line and sewer lines along existing driveways as further detailed in the Westford Conservation Commission's comment letter, in order to avoid activity within 100 feet of wetlands. The DEIR should also evaluate potential impacts of wastewater discharge and changes in site drainage to vernal pools ( "Bobby's pool" and "Spoon Pool" ) and other wetland habitat areas on and adjacent to the project site. The ENF proposes directing roof run-off to wetland habitat areas. This should be further discussed in the DEIR with an evaluation of potential impacts. The ENF should also address potential construction impacts to Spoon Pool as further detailed in comments from the Westford Conservation Commission. The proponent should also consult with the Westford Conservation Commission regarding potential vernal pools along Durkee Lane and potential wetlands impacts associated with proposed new drain pipes. The DEIR should provide an update on any proposed changes to the project resulting from these consultations

### Water Supply and Water Quality

Water supply for the units located in the Town of Acton is estimated at 96,000gpd and will be provided by the Acton Water District. The ENF proposes that the Westford portion of the project would obtain water (approximately 17,200 gpd) from the Littleton Water Supply Department. The DEIR should clarify whether the demand indicated reflects the most recent changes to the development plan (including proposed lot 4 units, reduction of townhouses and additional apartment buildings in Westford portion of site).

As requested by DEP in their comment letter, the proponent should submit (to DEP) documentation from the Acton Water District indicating that the District has adequate capacity to provide safe drinking water for the project. The DEIR should include a map at an appropriate scale showing all public and private water supply systems within a half-mile radius of the project site. Surface waters, Zone II boundaries and other water resource protection districts, should be identified on maps and site plans.

#### *Inter-basin Transfer*

The proposed water supply from Littleton constitutes an inter-basin transfer because Littleton's water supply sources are located in the Merrimack River basin (the proposed project site is located in the SuAsCo River basin.) The project is thus subject to review and approval by the Water Resources Commission (WRC). The proponent has indicated that a Determination of Insignificance is being requested under the Interbasin Transfer Act (ITA).

If in-town or in-basin water supply sources cannot be obtained for the Westford portion of the project, the proponent should include the application for the Request for Determination of Insignificance in the DEIR and discuss in detail why water to serve the Westford portion of the project cannot be obtained from the Towns of Acton or Westford. As noted by WRC in their comment letter, strict environmental criteria need to be met in order to obtain a Determination of Insignificance for a proposed transfer. The DEIR should include the analyses needed to demonstrate compliance with these criteria, and maps at an appropriate scale, as further detailed in the WRC's comment letter. I strongly encourage the proponent to consult with WRC prior to submittal of the DEIR.

#### *Irrigation Wells*

The DEIR should identify proposed locations of irrigation wells and evaluate potential impacts on site hydrology and wetlands resource areas. The proponent should consider landscaping approaches that minimize the need for irrigation (e.g. reduced lawn areas, natural plantings, and other xeriscaping techniques).

#### *Water Quality*

The DEIR should discuss measures proposed to ensure that appropriate measures will be taken to avoid and minimize adverse impacts to wetland resources and water quality. The DEIR should explain measures proposed to address potential impacts from the use of pesticides, herbicides and fertilizers. The DEIR should clarify how the proposed residences will be heated. If fuel oil is to be used, the DEIR should discuss where the tanks will be located and what measures will be taken to avoid spills and protect water quality.

#### Wastewater

The DEIR should address discrepancies between the Title 5 flow design and wastewater treatment facility design as noted by DEP in their comment letter, and demonstrate how the wastewater system is being designed to adequately handle the full build-out proposed. The

DEIR should clarify ownership and management arrangements for the wastewater treatment and disposal system and demonstrate how the project is being designed to ensure that adverse impacts to water quality will be avoided and minimized. The DEIR should also discuss impacts and mitigation associated with potential nutrient loading to water resources.

#### Rare Species and Habitat Conservation

The NHESP has determined that the proposed project will result in a "take" of the Blue-spotted salamander (*Ambystoma laterale*) as defined in the MA Endangered Species Act regulations (321 CMR 10.02). The proponent has been in consultation with NHESP regarding permitting of the project and has conducted a rare species survey and habitat evaluation. As a result of these consultations, the project has been redesigned to reduce impact to rare species habitat. Changes to the project include the elimination of 16 townhouses proposed for the Westford portion of the project site. Two single-family homes are now proposed in lieu of the 16 townhouses. The proponent has also committed to placing 28 acres of the project site under a permanent Conservation Restriction (CR), to enhance a wetland area for additional breeding habitat and to provide long-term monitoring for the local Blue-spotted salamander population.

I commend the proponent for its commitments to protection of rare species and their habitats. The proponent should continue consultations with NHESP to further develop a conservation plan for the project site and finalize boundaries for the proposed CR. The DEIR should provide an update on the Conservation and Management permitting process, the CR boundaries, and any changes to the project since the ENF filing that may affect rare species and their habitat. The DEIR should discuss habitat protection plans (including plans to protect upland areas associated with vernal pools and Blue-spotted salamander habitat) and include draft CR language. The DEIR should describe, and make clear commitments to, the mitigation measures proposed for rare species and habitat conservation. The DEIR should discuss the nature and timing of site development activities in relation the migration and breeding of the Blue-spotted salamander and measures that will be implemented to avoid and minimize adverse impacts to rare species.

The DEIR should also discuss potential project-related impacts to adjacent conservation lands from use of motorized dirt bikes or all terrain vehicles and identify measures to minimize adverse impacts. The DEIR should also discuss any proposed trail networks or connections to adjacent conservation lands.

#### Stormwater and Drainage

The DEIR should provide additional information to demonstrate how the proposed stormwater management system will achieve DEP standards for removal of suspended solids, and discuss arrangements for ownership and maintenance to ensure long-term effectiveness of the system. The ENF referred to a pre-development and a post-development drainage sketch and routing diagram. These drainage diagrams and a summary of the drainage analysis should be provided in the DEIR. The DEIR should also discuss how proposed changes in site drainage may impact hydrology and water quality of vernal pools and other wetlands resources on and

adjacent to the site, and describe how the project is being designed to avoid and minimize adverse impacts.

### Transportation

The DEIR should include a detailed traffic study prepared in conformance with the EOEA/EOTC Guidelines for EIR/EIS Traffic Impact Assessments and should identify appropriate mitigation measures for areas where the project will have an impact on traffic operations. The DEIR should provide a clear commitment to transportation impact mitigation and discuss the timing for implementation of mitigation measures. The DEIR should include a capacity analysis and a summary of average and 95<sup>th</sup> percentile queues for each intersection within the study area.

The traffic analysis presented in the ENF refers to development of 352 units on a 24-acre site. Although the Memorandum (included at back of attachment 7/book 2) provides some modifications to the traffic analysis, the proponent should ensure that the traffic analysis is updated to accurately reflect the full development being proposed. The DEIR should include a revised traffic analysis to address discrepancies in the ENF submittal and to expand on the analysis in accordance with this Scope. The revised analysis should address the full build out of Nagog Park and present a revised analysis for all intersections within the study area as further detailed in the MHD comment letter. As noted by MHD, a revised traffic analysis will most likely identify the need for additional mitigation measures beyond those proposed in the ENF.

The DEIR should include a signal warrant analysis for unsignalized locations within the study area where traffic operations are experiencing failing conditions. The proponent should also reevaluate recommendations for extending the exiting approach to Great Road (as proposed for a previous office park on the project site) and work with the Nagog Office Park proponent on this issue as recommended by MHD. The DEIR should include diagrams of the main intersections affected by the project to facilitate assessment of the adequacy of intersection geometry and lane configuration.

The DEIR should explain the assumptions inherent in the distribution analysis that resulted in the 40% northbound/55% southbound traffic flow projection. The DEIR should also clarify if this distribution analysis was based on previous site plans for office park use or modified to account for the proposed residential development scenario. The traffic analysis presented in the ENF was based on a modified analysis conducted for a previous office park proposal for the project site. The DEIR should demonstrate that the traffic analysis has adequately considered weekend traffic associated with residential development.

The DEIR should include a draft Transportation Demand Management (TDM) plan to encourage bicycling, walking and use of public transportation. The TDM plan should describe existing and proposed on and off-site pedestrian and bicycle facilities and infrastructure, and public transit services in the project area, and discuss how the project will be designed to reduce vehicle trip generation. Given that minimizing parking spaces is considered a valuable strategy for reducing the number of single-occupant vehicle trips, the DEIR should also provide a justification for the number of parking spaces proposed.

Currently, there are no public transportation services along the Great Road corridor in the vicinity of the project site. The proponent should contact the existing Nagog Office Park and the Village at Nagog Woods residential development to identify the potential for bus services, and provide the Lowell Regional Transit Authority with enough information to assess the feasibility of providing a bus route along the corridor. In the event that a bus route is not feasible, the proponent should consider working with Nagog Office Park and the Village at Nagog Woods to provide shuttle services to other area destinations and/or existing transit routes such as the Acton MBTA commuter rail station. The DEIR should include a map depicting proposed on-site sidewalks and bicycle routes, and demonstrate how they connect to neighboring office park, residential development and the existing Bruce Freeman bike trail in Acton. The DEIR should include an update on consultations related to the TDM plan and include clear commitments to TDM measures proposed (including any feasible improvements to enhance connections to the existing pedestrian, bicycle and public transit networks.)

The Towns of Acton and Westford have raised concerns regarding public safety and the adequacy of emergency services (including access and response time) to service the proposed development. The Town of Acton in its comment letter indicates that an agreement has been reached with the proponent regarding financial mitigation to address public safety impacts. I encourage the proponent to continue consultations with the Towns on these issues and to provide an update in the DEIR regarding any changes to the proposed project as a result of these consultations.

#### Inter-Municipal Agreements

The Town of Acton, as further detailed in its comment letter, has proposed an Inter-Municipal Agreement between Acton and Westford to address public safety issues and enforcement of environmental laws pertaining to wastewater treatment and disposal. The proposed wastewater disposal area is located in the Westford portion of the project site. However, the majority of the proposed housing units are located in Acton. As a result, the Towns of Acton and Westford have commented on the need to address cross-border enforcement issues. The DEIR should provide an update on the status of the proposed Inter-Municipal Agreement.

#### Construction and Demolition

The DEIR should include a construction management plan (CMP) describing project activities and their schedule and sequencing, site access and truck routing, and best management practices (BMPs) that will be used to avoid and minimize adverse environmental impacts. The CMP should address potential impacts and mitigation relating to land disturbance, noise, dust, odor, vehicle emissions, construction and demolition debris, and construction-related traffic.

#### Waste Management

The Town of Westford has noted in their comments that the project has the potential to generate 5-6 tons per year of household trash. The DEIR should discuss how the project will be

designed to promote waste minimization and recycling during construction and demolition, and operational phases. I encourage the proponent to work with the Towns of Westford and Acton on this issue as further detailed in the Westford Board of Health comment letter and to consider additional sustainable design elements listed below.

### Sustainable Design

In addition to traffic and other impacts addressed elsewhere in this Certificate, I encourage the proponent to consider air quality, waste management, energy use and other potential impacts associated with the proposed development, and to evaluate opportunities for sustainable design. This project presents a great opportunity to incorporate sustainable design elements that can provide environmental benefits as well as economic benefits for the proponent and future residents and building owners. To the maximum feasible extent, the proponent should incorporate sustainability into project design and implementation. The basic elements of a sustainable design program may include, but not be limited to, the following measures:

- Leadership in Energy and Environmental Design (LEED) certification;
- water conservation and reuse of wastewater and stormwater;
- ecological landscaping;
- use of Low Impact Development (LID) techniques (the proponent may find the following web sites useful [www.mass.gov/envir/lid](http://www.mass.gov/envir/lid) and [www.lid-stormwater.net](http://www.lid-stormwater.net) );
- optimization of natural day lighting, passive solar gain, and natural cooling;
- use of energy efficient HVAC and lighting systems, appliances and other equipment, and use of solar preheating of makeup air;
- favoring building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy;
- provision of easily accessible and user-friendly recycling system infrastructure into building design;
- development and implementation of a solid waste minimization and recycling plan;
- development and implementation of an annual audit program for energy consumption, waste streams, and use of renewable resources.

The DEIR should discuss sustainable design elements evaluated by the proponent and describe and commit to measures proposed to promote sustainable development.

### Mitigation

The DEIR should describe all measures to avoid, minimize and mitigate adverse effects on the environment and include a summary of mitigation measures to which the proponent is committed. The DEIR should include proposed Section 61 Findings for all state permits. The proposed Section 61 Findings should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation measures. A schedule for the implementation of mitigation measures should also be included in the DEIR.

### Comments

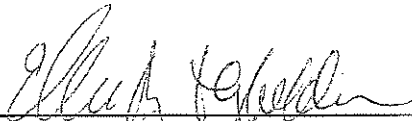
The DEIR should respond to the comments received on the ENF to the extent that they are within MEPA jurisdiction. The proponent should use either an indexed response to comment format, or direct narrative response. The DEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

#### Circulation

The DEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to the list of "comments received" below. A copy of the DEIR should be made available for public review at the Acton and Westford Public Libraries.

February 25, 2005

DATE

  
Ellen Roy Herzfelder, Secretary

#### Comments Received:

1/19/05	Edward H. Adelman
1/20/05	Acton Transportation Advisory Committee
1/21/05	Nagog Woods Community Corporation
1/21/05	Sudbury Valley Trustees
1/25/05	Town of Westford Board of Health
1/28/05	Northern Middlesex Council of Governments
1/31/05	Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program
1/31/05	Metropolitan Area Planning Council
2/02/05	Town of Westford, Office of the Town Manager
2/02/05	Water Resources Commission
2/09/05	Department of Environmental Protection, Central Regional Office
2/11/05	Acton Conservation Commission
2/16/05	Executive Office of Transportation, Office of Transportation Planning
2/18/05	Stephen D. Anderson, Anderson and Kreiger LLP, representing the Town of Acton, Board of Selectmen